Amendments to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1 - 10 (cancelled)

Claim 11 (currently amended) A kind of non-volatile memory structure, including: a base;

a gate dielectric layer on the base, the gate dielectric layer has at least one kind of hetero element, other than Nitrogen, to increase the electron trapping density;

a gate electrode layer on the top of the said gate dielectric layer; and

a source/drain electrodes at the base on both sides of the said gate dielectric layer.

Claim 12 (currently amended) The A kind of non-volatile memory structure, as claimed the structure in claim 11, where the gate dielectric layer in turns from bottom to the top including a first oxide layer, a nitride layer and a second oxide layer.

Claim 13 (currently amended) The A kind of non-volatile memory structure, as claimed the structure-in claim 11, where the hetero elements used are any one within Germanium (Ge), Silicon (Si), Nitrogen (N_2), Oxygen ($N_$

Claim 14 (currently amended) The A-kind-of-non-volatile memory structure, as claimed the structure in claim 11, where the hetero elements used are compounds of Germanium (Ge), Silicon (Si), Nitrogen (N), Oxygen (O).